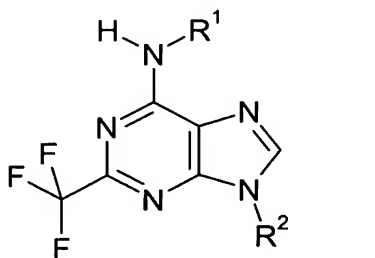


The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Presently Amended) A compound of Formula I:



wherein,

R^1 is H,

alkyl having 1 to 5 carbon atoms, which is unsubstituted ~~unsustituted~~ or substituted one or more times by halogen, hydroxy, or combinations thereof, and wherein a $-CH_2-$ group can be optionally replaced by $-O-$, $-S-$, or $-NH-$,

cycloalkyl having 3 to 6 carbon atoms, or

cycloalkylalkyl having 4 to 7 C atoms; and

R^2 is alkyl having 1 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, hydroxy, cyano or combinations thereof, wherein one or more $-CH_2-$ groups is each independently optionally replaced by $-O-$, $-S-$, or $-NH-$, and wherein optionally one or more $-CH_2CH_2-$ groups is replaced in each case by $-CH=CH-$ or $-C\equiv C-$,

alkyl ether having 3 to 12 carbon atoms,

cycloalkyl having 3 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano or combinations thereof,

cycloalkylalkyl having 4 to 12 C atoms, which is unsubstituted or substituted one or more times by C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano, halogen, or combinations thereof,

β1 aryl having 6 to 14 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

arylalkyl having 7 to 16 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

heteroaryl having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or substituted one or more times by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

heteroarylalkyl wherein the heteroaryl portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heteroaryl portion is unsubstituted or is substituted one or more times ~~in~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

β heterocycle having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or is substituted one or more times ~~in the~~ by heterocycle-alkyl wherein the heterocycle portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heterocycle portion is nonaromatic and is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof, or

carbocycle which is nonaromatic, monocyclic or bicyclic, group having 5 to 14 carbon atoms, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof; halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof; and

pharmaceutically acceptable salts thereof,

with the provisos that:

- β1
- (a) when R^1 is methyl, then R^2 is not arylalkyl, heteroarylalkyl, 2-(1,2,3,4-tetrahydro)quinolinyl-methyl, methyl or 2-butyl;
 - (b) when R^1 is cyclopropyl, R^2 is not 4-methylbenzyl;
 - (c) when R^1 is ethyl, then R^2 is not ethyl, 3-aminobenzyl, 2-thienylmethyl, 3-thienylmethyl, or 2-pyridylmethyl;
 - (d) when R^1 is cyclopropyl, then R^2 is not cyclopropylmethyl;
 - (e) when R^1 is H, then R^2 is not methyl, ethyl, benzyl, 4-methylbenzyl, or substituted tetrahydrofuranyl;
 - (f) when R^1 is methoxyethyl, then R^2 is not benzyl, 3-dimethylaminobenzyl, or 3-thienylmethyl;
 - (g) when R^1 is iso-butyl, then R^2 is not benzyl; and
 - (h) when R^1 is n-butyl, then R^2 is not n-butyl.

2. (Original): A compound according to claim 1, wherein when R^1 is methyl, R^2 is not arylalkyl, heteroarylalkyl, 2-(1,2,3,4-tetrahydro)quinolinyl-methyl or C_{1-5} -alkyl.

3. (Original): A compound according to claim 1, wherein R^1 is alkyl.

4. (Original): A compound according to claim 1, wherein R^1 is cycloalkyl.

5. (Original): A compound according to claim 1, wherein R^1 is cycloalkylalkyl.

6. (Original): A compound according to claim 1, wherein R^2 is alkyl.

7. (Original): A compound according to claim 1, wherein R^2 is alkyl ether.

8. (Original): A compound according to claim 1, wherein R^2 is cycloalkyl.

9. (Original): A compound according to claim 1, wherein R^2 is aryl.
10. (Original): A compound according to claim 1, wherein R^2 is arylalkyl.
11. (Original): A compound according to claim 1, wherein R^2 is heteroaryl.
12. (Original): A compound according to claim 1, wherein R^2 is heteroarylalkyl.
13. (Original): A compound according to claim 1, wherein R^2 heterocycle.
14. (Original): A compound according to claim 1, wherein R^2 heterocycle-alkyl.
15. (Original): A compound according to claim 1, wherein R^2 carbocycle.
16. (Original): A compound according to claim 1, wherein R^1 is alkyl, substituted alkyl, cycloalkyl or cycloalkylalkyl.
17. (Original): A compound according to claim 6, wherein R^1 is alkyl, cycloalkyl or cycloalkylalkyl.
18. (Original): A compound according to claim 7, wherein R^1 is alkyl, cycloalkyl or cycloalkylalkyl.
19. (Original): A compound according to claim 8, wherein R^1 is alkyl, cycloalkyl or cycloalkylalkyl.
20. (Original): A compound according to claim 9, wherein R^1 is alkyl, cycloalkyl or cycloalkylalkyl.

21. (Original): A compound according to claim 10, wherein R¹ is alkyl, cycloalkyl or cycloalkylalkyl.

22. (Original): A compound according to claim 11, wherein R¹ is alkyl, cycloalkyl or cycloalkylalkyl.

23. (Original): A compound according to claim 12, wherein R¹ is alkyl, cycloalkyl or cycloalkylalkyl.

β1 24. (Original): A compound according to claim 13, wherein R¹ is alkyl, cycloalkyl or cycloalkylalkyl.

25. (Original): A compound according to claim 14, wherein R¹ is alkyl, cycloalkyl or cycloalkylalkyl.

26. (Original): A compound according to claim 15, wherein R¹ is alkyl, cycloalkyl or cycloalkylalkyl.

27. (Original): A compound according to claim 1, wherein R¹ is methyl, ethyl, isopropyl, 2-hydroxyethyl, cyclopropyl, cyclopentyl, or cyclopropylmethyl.

28. (Original): A compound according to claim 1, wherein R¹ is methyl, ethyl, cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl.

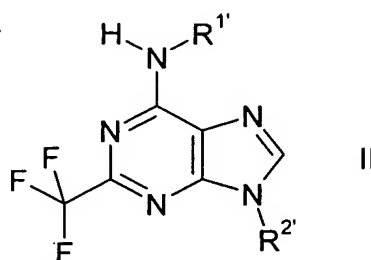
29. (Original): A compound according to claim 1, wherein R¹ is methyl, ethyl or cyclopropyl.

30. (Original): A compound according to claim 1, wherein R² is alkyl, arylalkyl, cycloalkyl, aryl, heteroaryl, heteroarylalkyl, or alkyl ether.

31. (Original): A compound according to claim 1, wherein R^2 is ethyl, isopropyl, butyl, tert-butyl, cyclopentyl, cyclohexyl, cycloheptyl, or arylalkyl which is unsubstituted or substituted one or more times by F, Cl, CN, CF_3 , CH_3 , C_2H_5 , isopropyl, OCH_3 , methylenedioxy, ethylenedioxy or combinations thereof.

32. (Original): A compound according to claim 1, wherein R^2 is substituted or unsubstituted benzyl, phenethyl or phenpropyl.

33. (Presently Amended): A compound of formula **II**



wherein

$R^{1'}$ is methyl, ethyl, or cyclopropyl; and

$R^{2'}$ is cycloalkyl having 3 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, C_{1-4} alkoxy, cyano or combinations thereof,

aryl having 6 to 14 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, hydroxy, C_{1-4} -alkoxy, halogenated C_{1-4} alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C_{1-4} alkylamino, di- C_{1-4} -alkylamino, C_{1-4} -hydroxyalkyl, C_{1-4} -hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C_{2-4} -acyl, C_{2-4} -alkoxycarbonyl, C_{1-4} -alkylthio, C_{1-4} -alkylsulphinyl, C_{1-4} -alkylsulphonyl, phenoxy, or combinations thereof,

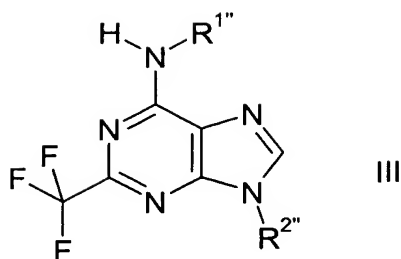
heteroaryl having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or substituted one or more times by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

B1
heterocycle having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof (e.g., piperidinyl, imidazoliny, imidazolidinyl, pyrrolinyl, pyrrolidinyl, morpholinyl, piperazinyl, and indolinyl), or

carbocycle which is nonaromatic, monocyclic or bicyclic, group having 5 to 14 carbon atoms, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof; and

pharmaceutically acceptable salts thereof.

34. (Presently Amended): A compound of Formula ~~III~~ III:



wherein

$R^{1''}$ is methyl, ethyl, or cyclopropyl; and

$R^{2''}$ is phenyl,

phenyl which is substituted one or more times by halogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, hydroxy, C_{1-4} -alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C_{1-4} alkylamino, di- C_{1-4} -alkylamino, C_{1-4} -hydroxyalkyl, C_{1-4} -hydroxyalkoxy, carboxy, cyano, C_{2-4} -acyl, C_{2-4} -alkoxycarbonyl, C_{1-4} -alkylthio, C_{1-4} -alkylsulphinyl, C_{1-4} -alkylsulphonyl, phenoxy, or combinations thereof; or

heteroaryl having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, substituted heteroaryl having 5 to 10 ring atoms, in which at least 1 ring atom is a heteroatom, which is unsubstituted or substituted one or more times by halogen, aryl, C_{1-4} -alkyl, C_{1-4} -alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C_{1-4} -alkylamino, di- C_{1-4} -alkylamino or combinations thereof,

or when R^1 is methyl or cyclopropyl R^2 can also be cycloalkyl having 3 to 12 carbon atoms; and

pharmaceutically acceptable salts thereof.

35. (Original): A compound according to claim 1, wherein said compound selected from:

6-Cyclopropylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine
6-Ethylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-fluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 6-difluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 3-difluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-propyl 2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-dimethoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3,4-methylenedioxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-thiophenemethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-methylphenethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Methylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclohexyl-2-trifluoromethylpurine
6-Methylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopentylmethyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-phenyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-fluorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclobutyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-norboranane)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(1-indanyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-fluorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-chlorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-thienyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-cyclopentyloxy-4-methoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-dimethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 6-dichloro-4-pyridylmethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-methoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine

151

6-Cyclopropylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-cyanophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 4-dimethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(6-methoxy-3-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-dimethylaminophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-aminophenyl)-2-trifluoromethylpurine
6-Methylamino-9-(2, 4-dimethoxy-5-pyrimidyl)-2-trifluoromethylpurine
6-Methylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-acetylphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-furanyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-ethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-ethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-methylenedioxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-ethoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3,4-dimethoxyphenyl)-2-trifluoromethylpurine; and

pharmaceutically acceptable salts thereof.

36. (Original): A compound according to claim 34, wherein said compound selected from:

6-Cyclopropylamino-9-(2,3-difluorobenzyl)-2-trifluoromethylpurine

6-Cyclopropylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3,4-dimethoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Methylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclohexyl-2-trifluoromethylpurine
6-Methylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-phenyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-fluorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclobutyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-norboranane)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-fluorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-chlorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-thienyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-dimethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 6-dichloro-4-pyridylmethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-methoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-cyanophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-pyridyl)-2-trifluoromethylpurine
6-Methylamino-9-(2, 4-dimethoxy-5-pyrimidyl)-2-trifluoromethylpurine
6-Methylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-acetylphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-ethoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3,4-dimethoxyphenyl)-2-trifluoromethylpurine; and

pharmaceutically acceptable salts thereof.

37. (Cancelled):

38. (Presently Amended): A method according to claim 54 37, wherein said compound is administered in an amount of 0.01-100 mg/kg of body weight/day.

39. (Presently Amended): A method according to claim 54 37, wherein said patient is a human.

40. (Presently Amended): A method according to claim 54 37, wherein said compound selected from:

6-Cyclopropylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine;
6-Ethylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-fluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 6-difluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 3-difluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-propyl 2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-dimethoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3,4-methylenedioxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-thiophenemethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-methylphenethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopropylmethyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Methylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclohexyl-2-trifluoromethylpurine
6-Methylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopentylmethyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-phenyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-fluorophenyl)-2-trifluoromethylpurine

6-Cyclopropylamino-9-cyclobutyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-norboranane)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(1-indanyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-fluorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-chlorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-tolyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-thienyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-cyclopentyloxy-4-methoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-dimethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 6-dichloro-4-pyridylmethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-methoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-cyanophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 4-dimethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(6-methoxy-3-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-dimethylaminophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-aminophenyl)-2-trifluoromethylpurine
6-Methylamino-9-(2, 4-dimethoxy-5-pyrimidyl)-2-trifluoromethylpurine
6-Methylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-acetylphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-furanyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-ethoxyphenyl)-2-trifluoromethylpurine

6-Cyclopropylamino-9-(2-ethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-methylenedioxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-ethoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3,4-dimethoxyphenyl)-2-trifluoromethylpurine
~~6-Methylamino-9-(3,4-dimethoxyphenyl)-2-trifluoromethylpurine~~; and
pharmaceutically acceptable salts thereof.

41. (Original): A method according to claim 40, wherein said patient is a human.

42. (Original): A method according to claim 41, wherein said compound is administered in an amount of 0.01-100 mg/kg of body weight/day.

43. (Cancelled):

44. (Cancelled):

45. (Cancelled):

46. (Presently Amended): A method according to claim 57 45, wherein said patient is a human.

47. (Original): A method according to claim 46, wherein said patient is suffering from memory impairment.

~~48~~ 49. (Presently Amended): A method according to claim 57 45, wherein said compound is administered in an amount of 0.01-100 mg/kg of body weight/day.

49. (Original claim 50) (Cancelled):

50 ~~51~~. (Presently Amended): A method according to claim 57 45, wherein said

compound selected from:

6-Cyclopropylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine
6-Methylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine
6-Ethylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-fluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 6-difluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 3-difluorobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-propyl 2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-dimethoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3,4-methylenedioxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-thiophenemethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-methylphenethyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopropylmethyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Methylamino-9-cyclopentyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclohexyl-2-trifluoromethylpurine
6-Methylamino-9-cycloheptyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclopentylmethyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-phenyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-fluorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-cyclobutyl-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-norboranane)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(1-indanyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-fluorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-chlorophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-tolyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-thienyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-cyclopentyloxy-4-methoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-dimethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 6-dichloro-4-pyridylmethyl)-2-trifluoromethylpurine

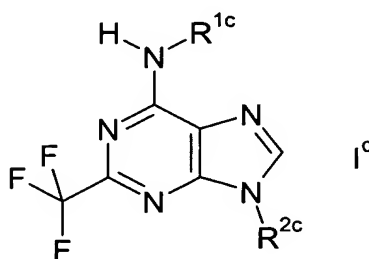
6-Cyclopropylamino-9-(4-methoxybenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-cyanophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2, 4-dimethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-nitrobenzyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(6-methoxy-3-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-pyridyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-dimethylaminophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-aminophenyl)-2-trifluoromethylpurine
6-Methylamino-9-(2, 4-dimethoxy-5-pyrimidyl)-2-trifluoromethylpurine
6-Methylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(4-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-acetylphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-methoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3-nitrophenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-furanyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(4-ethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(2-ethoxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3, 4-methylenedioxyphenyl)-2-trifluoromethylpurine
6-Cyclopropylamino-9-(3-ethoxyphenyl)-2-trifluoromethylpurine
6-Methylamino-9-(3,4-dimethoxyphenyl)-2-trifluoromethylpurine
~~6-Methylamino-9-(3,4-dimethoxyphenyl)-2-trifluoromethylpurine~~; and
pharmaceutically acceptable salts thereof.

51 52. (Presently Amended): A method according to claim 50 51, wherein said patient is a human.

52. (Original Claim 53) (Cancelled):

53. (Original Claim 54) (Cancelled):

54 56. (Presently Amended): A method for treating a patient having a disease involving decreased cAMP levels comprising administering to said patient an effective amount of a compound according to formula I^c:



wherein,

R^{1c} is H,

alkyl having 1 to 5 carbon atoms, which is unsubstituted ~~unsustituted~~ or substituted one or more times by halogen, hydroxy, or combinations thereof, and wherein a -CH₂- group can be optionally replaced by -O-, -S-, or -NH-,

cycloalkyl having 3 to 6 carbon atoms, or

cycloalkylalkyl having 4 to 7 C atoms;

R^{2c} is alkyl having 1 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, hydroxy, cyano or combinations thereof, wherein one or more -CH₂- groups is each independently optionally replaced by -O-, -S-, or -

NH-, and wherein optionally one or more -CH₂CH₂- groups is replaced in each case by -CH=CH- or -C≡C-,

alkyl ether having 3 to 12 carbon atoms,

cycloalkyl having 3 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano or combinations thereof,

61
cycloalkylalkyl having 4 to 12 C atoms, which is unsubstituted or substituted one or more times by C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano, halogen, or combinations thereof,

aryl having 6 to 14 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

arylalkyl having 7 to 16 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

heteroaryl having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom,

which is unsubstituted or substituted one or more times by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

b1
heteroarylalkyl wherein the heteroaryl portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heteroaryl portion is unsubstituted or is substituted one or more times in by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

heterocycle having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof,

heterocycle-alkyl wherein the heterocycle portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heterocycle portion is nonaromatic and is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof, or

carbocycle which is nonaromatic, monocyclic or bicyclic, group having 5 to 14 carbon atoms, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof; and

pharmaceutically acceptable salts thereof,

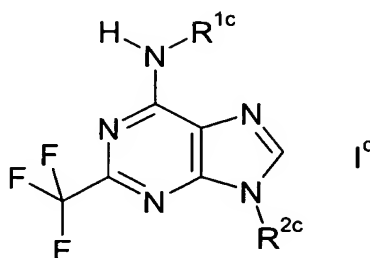
with the proviso that said compound is not 6-methylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine.

55 57. (Presently Amended): A method according to claim 54 56, wherein when R^{1c} is methyl, then R^{2c} is not arylalkyl, methyl or 2-butyl, and when R^{1c} is H, then R^{2c} is not benzyl.

56 58. (Presently Amended): A method according to claim 54 56, wherein:

- (a) when R^{1c} is methyl, then R^{2c} is not arylalkyl, heteroarylalkyl, 2-(1,2,3,4-tetrahydro)quinoliny-methyl, methyl or 2-butyl;
- (b) when R^{1c} is cyclopropyl, R^{2c} is not 4-methylbenzyl;
- (c) when R^{1c} is ethyl, then R^{2c} is not ethyl, 3-aminobenzyl, 2-thienylmethyl, 3-thienylmethyl, or 2-pyridylmethyl;
- (d) when R^{1c} is cyclopropyl, then R^{2c} is not cyclopropylmethyl;
- (e) when R^{1c} is H, then R^{2c} is not methyl, ethyl, benzyl, 4-methylbenzyl, or substituted tetrahydrofuranyl;
- (f) when R^{1c} is methoxyethyl, then R^{2c} is not benzyl, 3-dimethylaminobenzyl, or 3-thienylmethyl;
- (g) when R^{1c} is iso-butyl, then R^{2c} is not benzyl; and
- (h) when R^{1c} is n-butyl, then R^{2c} is not n-butyl.

57 59. (Presently Amended): A method of inhibiting PDE4 enzyme activity in a patient comprising administering to said patient an effective amount of a compound according to formula I^c:



wherein,

R^{1c} is H,

alkyl having 1 to 5 carbon atoms, which is unsubstituted ~~unsustituted~~ or substituted one or more times by halogen, hydroxy, or combinations thereof, and wherein a -CH₂- group can be optionally replaced by -O-, -S-, or -NH-,

cycloalkyl having 3 to 6 carbon atoms, or

cycloalkylalkyl having 4 to 7 C atoms;

R^{2c} is alkyl having 1 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, hydroxy, cyano or combinations thereof, wherein one or more -CH₂- groups is each independently optionally replaced by -O-, -S-, or -NH-, and wherein optionally one or more -CH₂CH₂- groups is replaced in each case by -CH=CH- or -C≡C-,

alkyl ether having 3 to 12 carbon atoms,

cycloalkyl having 3 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano or combinations thereof,

cycloalkylalkyl having 4 to 12 C atoms, which is unsubstituted or substituted one or more times by C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano, halogen, or combinations thereof,

aryl having 6 to 14 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

arylalkyl having 7 to 16 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

heteroaryl having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or substituted one or more times by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino,

carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

heteroarylalkyl wherein the heteroaryl portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heteroaryl portion is unsubstituted or is substituted one or more times in by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

B1
heterocycle having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof,

heterocycle-alkyl wherein the heterocycle portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heterocycle portion is nonaromatic and is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof, or

carbocycle which is nonaromatic, monocyclic or bicyclic, group having 5 to 14 carbon atoms, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-

alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof; and

pharmaceutically acceptable salts thereof,

with the proviso that said compound is not 6-methylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine.

B¹ 58 60. (Presently Amended): A method according to claim 57 59, wherein when R^{1c} is methyl, then R^{2c} is not arylalkyl, methyl or 2-butyl, and when R^{1c} is H, then R^{2c} is not benzyl

59 61. (Presently Amended): A method according to claim 57 59, wherein:

- (a) when R^{1c} is methyl, then R^{2c} is not arylalkyl, heteroarylalkyl, 2-(1,2,3,4-tetrahydro)quinoliny-methyl, methyl or 2-butyl;
- (b) when R^{1c} is cyclopropyl, R^{2c} is not 4-methylbenzyl;
- (c) when R^{1c} is ethyl, then R^{2c} is not ethyl, 3-aminobenzyl, 2-thienylmethyl, 3-thienylmethyl, or 2-pyridylmethyl;
- (d) when R^{1c} is cyclopropyl, then R^{2c} is not cyclopropylmethyl;
- (e) when R^{1c} is H, then R^{2c} is not methyl, ethyl, benzyl, 4-methylbenzyl, or substituted tetrahydrofuranyl;
- (f) when R^{1c} is methoxyethyl, then R^{2c} is not benzyl, 3-dimethylaminobenzyl, or 3-thienylmethyl;
- (g) when R^{1c} is iso-butyl, then R^{2c} is not benzyl; and
- (h) when R^{1c} is n-butyl, then R^{2c} is not n-butyl.

60 62. (Presently Amended): A pharmaceutical composition comprising a compound according to claim 1 and a pharmaceutically acceptable carrier.

61 ~~63~~. (Presently Amended): A composition according to claim 60 ~~62~~, wherein said composition contains 0.1-50 mg of said compound.

62. (Original Claim 64) (Cancelled):

63. (Original Claim 65) (Cancelled):

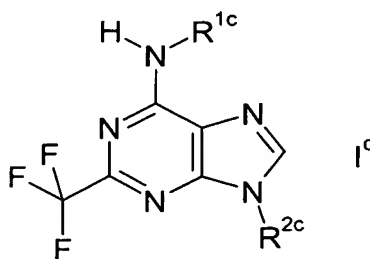
64. (Original Claim 66) (Cancelled):

65. (Original Claim 67) (Cancelled):

66. (Original Claim 68) (Cancelled):

67. (Original Claim 64) (Cancelled):

68 ~~70~~. (Presently Amended): A method of treating a patient suffering from an allergic or inflammatory disease, resulting from decreased cyclic AMP levels, elevated phosphodiesterase 4 levels, or both, comprising administering to said patient an effective amount of a compound according to formula I^c:



wherein,

R^{1c} is H,

alkyl having 1 to 5 carbon atoms, which is unsubstituted ~~unsubstituted~~ or substituted one or more times by halogen, hydroxy, or combinations thereof, and wherein a -CH₂- group can be optionally replaced by -O-, -S-, or -NH-,

cycloalkyl having 3 to 6 carbon atoms, or

cycloalkylalkyl having 4 to 7 C atoms;

B¹ R^{2c} is alkyl having 1 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, hydroxy, cyano or combinations thereof, wherein one or more -CH₂- groups is each independently optionally replaced by -O-, -S-, or -NH-, and wherein optionally one or more -CH₂CH₂- groups is replaced in each case by -CH=CH- or -C≡C-,

alkyl ether having 3 to 12 carbon atoms,

cycloalkyl having 3 to 12 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano or combinations thereof,

cycloalkylalkyl having 4 to 12 C atoms, which is unsubstituted or substituted one or more times by C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, C₁₋₄ alkoxy, cyano, halogen, or combinations thereof,

aryl having 6 to 14 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-

alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

arylalkyl having 7 to 16 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

β¹
heteroaryl having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or substituted one or more times by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

heteroarylalkyl wherein the heteroaryl portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heteroaryl portion is unsubstituted or is substituted one or more times in by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

heterocycle having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-

alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof,

B1
heterocycle-alkyl wherein the heterocycle portion has 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom and the alkyl portion has 1 to 3 carbon atoms, the heterocycle portion is nonaromatic and is unsubstituted or is substituted one or more times ~~in the~~ by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, or combinations thereof, or

carbocycle which is nonaromatic, monocyclic or bicyclic, group having 5 to 14 carbon atoms, which is unsubstituted or is substituted one or more times ~~in the~~ by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof; and

pharmaceutically acceptable salts thereof,

with the proviso that said compound is not 6-methylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine.

69 ~~71~~. (Presently Amended): A method according to claim 68 ~~70~~, wherein when R^{1c} is methyl, then R^{2c} is not arylalkyl, methyl or 2-butyl, and when R^{1c} is H, then R^{2c} is not benzyl

70 ~~72~~. (Presently Amended): A method according to claim 68 ~~70~~, wherein:
(a) when R^{1c} is methyl, then R^{2c} is not arylalkyl, heteroarylalkyl, 2-(1,2,3,4-

tetrahydro)quinolinyl-methyl, methyl or 2-butyl;

(b) when R^{1c} is cyclopropyl, R^{2c} is not 4-methylbenzyl;

(c) when R^{1c} is ethyl, then R^{2c} is not ethyl, 3-aminobenzyl, 2-thienylmethyl, 3-thienylmethyl, or 2-pyridylmethyl;

(d) when R^{1c} is cyclopropyl, then R^{2c} is not cyclopropylmethyl;

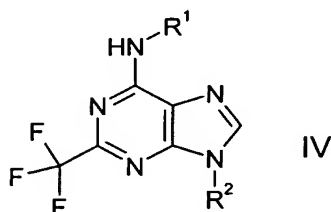
(e) when R^{1c} is H, then R^{2c} is not methyl, ethyl, benzyl, 4-methylbenzyl, or substituted tetrahydrofuranyl;

(f) when R^{1c} is methoxyethyl, then R^{2c} is not benzyl, 3-dimethylaminobenzyl, or 3-thienylmethyl;

(g) when R^{1c} is iso-butyl, then R^{2c} is not benzyl; and

(h) when R^{1c} is n-butyl, then R^{2c} is not n-butyl.

71 73. (Presently Amended): A process for preparing compounds of the formula IV IV



wherein

R^1 is H,

alkyl having 1 to 5 carbon atoms, which is unsubstituted ~~unsustituted~~ or substituted one or more times by halogen, hydroxy, or combinations thereof, and wherein a $\text{-CH}_2\text{-}$ group can be optionally replaced by -O- , -S- , or -NH- ,

cycloalkyl having 3 to 6 carbon atoms, or

cycloalkylalkyl having 4 to 7 C atoms; and

R² is aryl having 6 to 14 carbon atoms, which is unsubstituted or substituted one or more times by halogen, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, nitro, methylenedioxy, ethylenedioxy, amino, C₁₋₄ alkylamino, di-C₁₋₄-alkylamino, C₁₋₄-hydroxyalkyl, C₁₋₄-hydroxyalkoxy, carboxy, cyano, hydroxamic acid, carboxamide, C₂₋₄-acyl, C₂₋₄-alkoxycarbonyl, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, phenoxy, or combinations thereof,

β1 heteroaryl having 5 to 10 ring atoms in which at least 1 ring atom is a heteroatom, which is unsubstituted or substituted one or more times by halogen, aryl, C₁₋₄ alkyl, halogenated C₁₋₄ alkyl, hydroxy, C₁₋₄-alkoxy, halogenated C₁₋₄ alkoxy, cyano, trifluoromethyl, nitro, oxo, amino, C₁₋₄-alkylamino, di-C₁₋₄-alkylamino, carboxy, alkoxycarbonyl, hydroxamic acid, carboxamide, C₁₋₄-alkylthio, C₁₋₄-alkylsulphinyl, C₁₋₄-alkylsulphonyl, or combinations thereof,

said process comprising:

reacting 6-*N*-R¹-substituted adenine with an arylboronic acid or heteroarylboronic acid in the presence of trialkylamine wherein the alkyl portions each have 1 to 5 C atoms, ~~e.g., triethylamine~~, as a base, a copper catalyst, and a polar aprotic solvent, ~~for example THF and CH₃CN (particularly, CH₃CN)~~ at a temperature of at least 50°C, ~~e.g., 50-60°C~~.

72 74. (Presently Amended): A compound according to claim 1, wherein R² is cycloalkylalkyl.

73 75. (Presently Amended): A compound according to claim 72 74 wherein R¹ is alkyl, cycloalkyl or cycloalkylalkyl.

74. (Presently Amended): A compound according to claim 1, wherein said compound is 6-cyclopropylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine, or a pharmaceutically acceptable salt thereof.

75. (Presently Amended): A method according to claim 54, ~~45~~, wherein said compound is 6-cyclopropylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine, or a pharmaceutically acceptable salt thereof.

76. (New): A method according to claim 57, wherein said compound is 6-cyclopropylamino-9-(2-methoxyphenyl)-2-trifluoromethylpurine, or a pharmaceutically acceptable salt thereof.

77. (New): A compound according to claim 1, wherein said compound is 6-cyclopropylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine, or a pharmaceutically acceptable salt thereof

78. (New): A method according to claim 54, wherein said compound 6-cyclopropylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine, or a pharmaceutically acceptable salt thereof.

79. (New): A method according to claim 57, wherein said compound 6-cyclopropylamino-9-(2-fluorobenzyl)-2-trifluoromethylpurine, or a pharmaceutically acceptable salt thereof.

80. (New): A compound according to claim 1, wherein R^1 is alkyl or cycloalkyl and R^2 is phenyl or heteroaryl, in each case substituted or unsubstituted.

81. (New): A method according to claim 54, wherein R^1 is alkyl or cycloalkyl and R^2 is phenyl or heteroaryl, in each case substituted or unsubstituted.

82. (New): A method according to claim 57, wherein R^1 is alkyl or cycloalkyl and R^2 is phenyl or heteroaryl, in each case substituted or unsubstituted.